# **EPA Superfund Record of Decision:**

FIKE CHEMICAL, INC. EPA ID: WVD047989207 OU 02 NITRO, WV 09/28/1990

- \* MANY OF THE FACILITY STRUCTURES ARE IN POOR CONDITION AND COULD COLLAPSE IN THE NEAR FUTURE, WHILE MANY OTHER STRUCTURES WILL COLLAPSE WITHOUT CONTINUED MAINTENANCE. THIS SITUATION POSES A SAFETY HAZARD TO PEOPLE ON SITE. IN ADDITION, COLLAPSE OF A TANK CONTAINING CHEMICAL RESIDUALS MAY PRESENT AN UNACCEPTABLE RISK TO RESIDENTS.
- \* FRIABLE ASBESTOS ASSOCIATED WITH THE FACILITY MAY BE RELEASED INTO THE AIR AND PRESENT AN UNACCEPTABLE SHORT-TERM HEALTH RISK, WHILE ADDITIONAL ASBESTOS MAY BE RELEASED OVER A LONGER TERM AND PRESENT AN UNACCEPTABLE RISK. ASBESTOS IS A KNOWN HUMAN CARCINOGEN.
- \* THE FACILITY COMPONENTS PRESENT AN OBSTACLE TO POTENTIAL FUTURE SITE WORK. WITHOUT REMOVAL OF THE THESE COMPONENTS, A COMPREHENSIVE INVESTIGATION OF CONTAMINATION REMAINING AT THE SITE CANNOT BE COMPLETED.
- \* CONTAMINANT RESIDUALS IN TANKS, EQUIPMENT, AND/OR STRUCTURES MAY PRESENT AN UNACCEPTABLE HEALTH RISK THROUGH DIRECT CONTACT PATHWAYS. IN ADDITION, A FIRE MAY RELEASE THE CONTAMINANTS OF CONCERN TO THE LOCAL COMMUNITY, POSING AN UNACCEPTABLE RISK TO RESIDENTS. MANY OF THE

CONTAMINANTS OF CONCERN ARE DEFINED AS HAZARDOUS UNDER RCRA OR ARE OTHERWISE KNOWN TO BE TOXIC.

WHILE RISKS DUE TO DIRECT CONTACT WITH CONTAMINANT RESIDUALS CANNOT BE QUANTIFIED AT THIS TIME, ACTUAL OR THREATENED RELEASES OF HAZARDOUS SUBSTANCES IN THE RESIDUALS, IF NOT REMEDIATED, MAY PRESENT AN IMMINENT AND SUBSTANTIAL ENDANGERMENT TO PUBLIC HEALTH, WELFARE, OR THE ENVIRONMENT AS SET FORTH IN SECTION 106 OF CERCLA, 42 USC SECTION 9606.

## REMEDIAL ACTION OBJECTIVES

THE OBJECTIVES OF REMEDIAL ACTIONS ADDRESSING THE TANKS, EQUIPMENT, AND STRUCTURES ARE AS FOLLOWS:

- \* ELIMINATE SAFETY HAZARDS ASSOCIATED WITH UNSTABLE COMPONENTS OF THE FACILITY.
- \* ELIMINATE UNACCEPTABLE HEALTH RISKS POSED BY ASBESTOS.
- \* REDUCE OBSTACLES TO FUTURE SITE INVESTIGATION.
- \* ELIMINATE UNACCEPTABLE HEALTH AND ENVIRONMENTAL RISK POSED BY CONTAMINANT RESIDUALS.

## #DA

# DESCRIPTION OF ALTERNATIVES

IN THE FFS, ENGINEERING TECHNOLOGIES APPLICABLE TO THE REMEDIAL ACTION OBJECTIVES WERE IDENTIFIED AND EVALUATED. THE TECHNOLOGIES DETERMINED TO BE MOST APPLICABLE WERE DEVELOPED INTO REMEDIAL ALTERNATIVES. THE REMEDIAL ALTERNATIVES FOR TANKS, EQUIPMENT, AND STRUCTURES ARE DESCRIBED BELOW AND ARE NUMBERED TO CORRESPOND TO THE ALTERNATIVE NUMBERS IN THE FFS REPORT.

# ALTERNATIVE D1 - NO ACTION

THIS ALTERNATIVE WILL NOT INCLUDE ANY REMEDIAL ACTIONS TO ADDRESS THE UNACCEPTABLE RISKS ASSOCIATED WITH THE TANKS, EQUIPMENT, AND STRUCTURES AT THE FORMER CHEMICAL PROCESSING FACILITY. SINCE EXISTING SAFETY AND HEALTH RISKS WOULD REMAIN, THIS ALTERNATIVE WOULD NOT BE PROTECTIVE OF HUMAN HEALTH OR THE ENVIRONMENT. THIS ALTERNATIVE IS REQUIRED BY THE NCP AND IS USED AS A BASELINE FOR COMPARISON WITH OTHER REMEDIAL ALTERNATIVES FOR THE TANKS, EQUIPMENT, AND STRUCTURES.

ALTERNATIVE D2 - FENCING

UNDER THIS ALTERNATIVE, PORTIONS OF THE EXISTING PERIMETER FENCE WOULD BE REPLACED, AS NEEDED. THE REPLACEMENT WOULD MATCH THE EXISTING FENCE.

THE LENGTH OF THE SECTION TO BE REPLACED IS ESTIMATED TO BE 1,100 FEET. WHILE THIS ALTERNATIVE WOULD REDUCE HEALTH AND SAFETY RISKS OF CONCERN, IT WOULD NOT BE PROTECTIVE OF HUMAN HEALTH AND THE ENVIRONMENT.

FENCING WOULD NOT COMPLY WITH ACTION-SPECIFIC ARARS. SIGNIFICANT ACTION-SPECIFIC ARARS INCLUDE THOSE
ADDRESSING RCRA TANK CLOSURE. RCRA CLOSURE REQUIREMENTS ARE ALSO APPLICABLE OR RELEVANT AND APPROPRIATE TO
THE SITE EQUIPMENT OR STRUCTURES WHICH CONTAIN RCRA HAZARDOUS WASTE OR MATERIAL SUFFICIENTLY SIMILAR TO A
HAZARDOUS WASTE, RESPECTIVELY. RCRA CLOSURE REQUIREMENTS INCLUDE DECONTAMINATION AND/OR SECURE DISPOSAL.

#### ALTERNATIVE D3 - TANK REMOVAL

THIS ALTERNATIVE INVOLVES DISMANTLING AND DECONTAMINATION OF APPROXIMATELY 425 TANKS. APPROXIMATELY 240 CUBIC FEET OF ASBESTOS-CONTAINING TANK AND PROCESS LINE INSULATION (ALL IDENTIFIED FRIABLE ASBESTOS) WOULD BE REMOVED AND DISPOSED IN AN OFFSITE LANDFILL FOR NONHAZARDOUS WASTE MEETING REQUIREMENTS OF 40 CFR SECTION 61.156. OTHER FACILITY COMPONENTS, SUCH AS BUILDINGS AND FOUNDATIONS, WOULD NOT BE REMOVED. DECONTAMINATED TANKS WOULD BE SOLD AS SCRAP, RECYCLED, OR DISPOSED IN AN OFFSITE RCRA SUBTITLE C OR RCRA SUBTITLE D LANDFILL. TANKS THAT CONTAIN A RCRA WASTE AND THAT CANNOT BE DECONTAMINATED WOULD BE DISPOSED IN AN OFFSITE RCRA SUBTITLE C LANDFILL. DECONTAMINATION FLUIDS (ESTIMATED TO BE APPROXIMATELY 30,000 GALLONS) GENERATED DURING TANK CLEANING OPERATIONS WOULD BE TREATED AT THE CST PLANT. DECONTAMINATION FLUIDS WOULD BE STORED IN A TANK PRIOR TO TREATMENT BY THE CST PLANT. THE EXISTING PERIMETER FENCE WOULD BE MAINTAINED.

THIS ALTERNATIVE WILL COMPLY WITH RCRA TANK CLOSURE STANDARDS, OSHA STANDARDS, AND WEST VIRGINIA AIR POLLUTION CONTROL REGULATIONS. THE RCRA CLOSURE STANDARDS FOR TANKS (40 CFR PART 265, SUBPART J) WOULD BE APPLICABLE FOR ANY TANKS THAT CONTAIN OR ARE CONTAMINATED WITH RCRA HAZARDOUS WASTES. RCRA TANK CLOSURE STANDARDS ARE RELEVANT AND APPROPRIATE FOR TANKS CONTAINING MATERIALS SIMILAR TO RCRA WASTES. RCRA TANK CLOSURE STANDARDS REQUIRE DECONTAMINATION AND/OR PROPER DISPOSAL OF TANKS.

OSHA STANDARDS (SEE TABLE 6) ARE APPLICABLE FOR THE REMEDIAL ACTIVITIES OF CONCERN. THE REMOVAL AND DISPOSAL OF ASBESTOS ARE REGULATED UNDER THE CLEAN AIR ACT (40 CFR PART 61, SUBPART M).

STATE AIR POLLUTION CONTROL REGULATIONS IN WVCSR 45-8, 9, 12, AND 17 ARE APPLICABLE AND INCLUDE REQUIREMENTS TO PREVENT AND CONTROL PARTICULATE AIR POLLUTION, INCLUDING FUGITIVE EMISSIONS, FROM MATERIALS HANDLING.

CONTAMINATED TANKS CONTAINING A RCRA HAZARDOUS WASTE, IF ANY, WOULD BE TRANSPORTED TO A HAZARDOUS WASTE LANDFILL IN COMPLIANCE WITH STANDARDS FOR HAZARDOUS WASTE GENERATORS AND TRANSPORTERS (40 CFR PARTS 262 AND 263) AND DOT REGULATIONS PERTAINING TO TRANSPORTATION OF HAZARDOUS MATERIALS (49 CFR PARTS 107 AND 171 THROUGH 179).

# ALTERNATIVE D4 - PARTIAL FACILITY REMOVAL

THIS ALTERNATIVE INVOLVES DISMANTLING AND DECONTAMINATION OF ALL 425 TANKS, ALL EQUIPMENT, AND ALL ABOVE-GROUND STRUCTURES, WITH THE EXCEPTION OF A FEW BUILDINGS WHICH MAY BE MAINTAINED AS STORAGE FACILITIES. CONCRETE SLABS AND FOUNDATIONS WOULD NOT BE REMOVED. APPROXIMATELY 525 CUBIC FEET OF ASBESTOS-CONTAINING MATERIALS WOULD BE DISPOSED IN AN OFFSITE LANDFILL FOR NONHAZARDOUS WASTE MEETING REQUIREMENTS OF 40 CFR SECTION 61.156. DECONTAMINATED TANKS AND OTHER METAL STRUCTURES WOULD BE SOLD AS SCRAP, RECYCLED, OR DISPOSED IN A RCRA SUBTITLE C OR SUBTITLE D LANDFILL. FACILITY COMPONENTS THAT CONTAIN A RCRA HAZARDOUS WASTE (OR A SUBSTANCE SUFFICIENTLY SIMILAR TO HAZARDOUS WASTE) AND THAT COULD NOT BE DECONTAMINATED WOULD BE DISPOSED AT AN OFFSITE RCRA SUBTITLE C LANDFILL. THE EXISTING PERIMETER FENCE WOULD BE MAINTAINED. DECONTAMINATION FLUIDS WOULD BE TREATED AT THE CST PLANT. DECONTAMINATION FLUIDS WOULD BE STORED IN A TANK PRIOR TO TREATMENT. SEVERAL BUILDINGS MAY BE LEFT INTACT FOR USE AS STORAGE DURING REMEDIATION.

THIS ALTERNATIVE WILL COMPLY WITH RCRA TANK CLOSURE STANDARDS, OSHA STANDARDS, AND STATE AIR POLLUTION CONTROL REGULATIONS. THE RCRA CLOSURE STANDARDS FOR TANKS (40 CFR PART 265, SUBPART J) ARE APPLICABLE FOR ANY TANKS AND VESSELS THAT CONTAIN OR ARE CONTAMINATED WITH RCRA HAZARDOUS WASTES. RCRA TANK CLOSURE STANDARDS ARE RELEVANT AND APPROPRIATE FOR TANKS AND VESSELS CONTAINING MATERIALS SUFFICIENTLY SIMILAR TO A HAZARDOUS WASTE. RCRA TANK CLOSURE STANDARDS REQUIRE DECONTAMINATION AND/OR PROPER DISPOSAL OF TANKS. RCRA CLOSURE STANDARDS (40 CFR PART 265, SUBPART G) ARE APPLICABLE FOR EQUIPMENT AND/OR STRUCTURES CONTAINING A RCRA HAZARDOUS WASTE AND RELEVANT AND APPROPRIATE WHERE EQUIPMENT AND/OR STRUCTURES CONTAIN A MATERIAL SUFFICIENTLY SIMILAR TO A RCRA HAZARDOUS WASTE.

OSHA STANDARDS (SEE TABLE 6) FOR ASBESTOS ARE APPLICABLE FOR THE REMEDIAL ACTIVITIES OF CONCERN. THE REMOVAL

AND DISPOSAL OF ASBESTOS IS REGULATED UNDER THE CLEAN AIR ACT (40 CFR PART 61, SUBPART M).

STATE AIR POLLUTION CONTROL REGULATIONS IN WVCSR 45-8, 9, 12, AND 17 ARE APPLICABLE AND INCLUDE REQUIREMENTS TO PREVENT AND CONTROL PARTICULATE AIR POLLUTION, INCLUDING FUGITIVE EMISSIONS, FROM MATERIALS HANDLING.

HAZARDOUS MATERIALS WOULD BE TRANSPORTED TO OFFSITE FACILITIES IN COMPLIANCE WITH STANDARDS FOR HAZARDOUS WASTE GENERATORS AND TRANSPORTERS (40 CFR PARTS 262 AND 263) AND DOT REGULATIONS PERTAINING TO TRANSPORTATION OF HAZARDOUS MATERIALS (49 CFR PARTS 107 AND 171 THROUGH 179).

#### ALTERNATIVE D5 - COMPLETE FACILITY REMOVAL

THIS ALTERNATIVE INVOLVES DISMANTLING AND DECONTAMINATION OF THE ENTIRE CHEMICAL PROCESSING FACILITY, INCLUDING CONCRETE SLABS AND FOUNDATIONS. ASBESTOS-CONTAINING MATERIALS WOULD BE DISPOSED IN AN OFFSITE LANDFILL FOR NONHAZARDOUS WASTE MEETING REQUIREMENTS OF 40 CFR SECTION 61.156. DECONTAMINATED TANKS AND OTHER METAL STRUCTURES WOULD BE SOLD AS SCRAP, RECYCLED, OR DISPOSED IN AN OFFSITE RCRA SUBTITLE C OR SUBTITLE D LANDFILL. FACILITY COMPONENTS THAT CONTAIN A RCRA HAZARDOUS WASTE (OR A SUBSTANCE SIMILAR TO A RCRA HAZARDOUS WASTE) AND THAT COULD NOT BE DECONTAMINATED WOULD BE DISPOSED AT AN OFFSITE RCRA SUBTITLE C LANDFILL. THE EXISTING PERIMETER FENCE WOULD BE MAINTAINED. DECONTAMINATION FLUIDS WOULD BE STORED IN A TANK PRIOR TO TREATMENT AT THE CST PLANT. THIS ALTERNATIVE WILL COMPLY WITH ALL IDENTIFIED ARARS, INCLUDING ALL RCRA CLOSURE STANDARDS, OSHA STANDARDS, AND STATE AIR POLLUTION CONTROL REGULATIONS. THE RCRA CLOSURE STANDARDS FOR TANKS (40 CFR PART 265, SUBPART J) ARE APPLICABLE FOR ANY TANKS AND VESSELS THAT CONTAIN OR ARE CONTAMINATED WITH RCRA HAZARDOUS WASTES. TANK CLOSURE STANDARDS ARE RELEVANT AND APPROPRIATE FOR TANKS AND VESSELS CONTAINING MATERIALS SUFFICIENTLY SIMILAR TO A RCRA HAZARDOUS WASTE THAT ARE NOT HAZARDOUS, AS DEFINED BY RCRA. RCRA TANK CLOSURE STANDARDS REQUIRE DECONTAMINATION AND/OR PROPER DISPOSAL OF TANKS. RCRA CLOSURE STANDARDS (40 CFR PART 265, SUBPART G) ARE APPLICABLE FOR EQUIPMENT AND/OR STRUCTURES CONTAINING A RCRA HAZARDOUS WASTE AND RELEVANT AND APPROPRIATE WHERE EQUIPMENT AND/OR STRUCTURES CONTAIN A MATERIAL SUFFICIENTLY SIMILAR TO A RCRA HAZARDOUS WASTE.

OSHA STANDARDS (SEE TABLE 6) ARE APPLICABLE FOR THE REMEDIAL ACTIVITIES OF CONCERN. THE REMOVAL AND DISPOSAL OF ASBESTOS IS REGULATED UNDER THE CLEAN AIR ACT (40 CFR PART 61, SUBPART M).

STATE AIR POLLUTION CONTROL REGULATIONS IN WVCSR 45-8, 9, 12, AND 17 ARE APPLICABLE AND INCLUDE REQUIREMENTS TO PREVENT AND CONTROL PARTICULATE AIR POLLUTION, INCLUDING FUGITIVE EMISSIONS, FROM MATERIALS HANDLING.

HAZARDOUS MATERIALS WOULD BE TRANSPORTED TO OFFSITE FACILITIES IN COMPLIANCE WITH STANDARDS FOR HAZARDOUS WASTE GENERATORS AND TRANSPORTERS (40 CFR PARTS 262 AND 263) AND DOT REGULATIONS PERTAINING TO TRANSPORTATION OF HAZARDOUS MATERIALS (49 CFR PARTS 107 AND 171 THROUGH 179).

## #SCA

SUMMARY OF COMPARATIVE ANALYSIS OF ALTERNATIVES

THE NCP (40 CFR SECTION 300.430(E)(9)(III)) REQUIRES THAT ALTERNATIVES BE EVALUATED PURSUANT TO THE FOLLOWING NINE CRITERIA:

# 1) OVERALL PROTECTION OF HUMAN HEALTH AND THE ENVIRONMENT

ALTERNATIVE D5 WOULD INCLUDE THE REMOVAL OF THE ENTIRE FACILITY, INCLUDING CONCRETE PADS AND FOUNDATIONS, AND ALL RISKS DIRECTLY ASSOCIATED WITH THE FACILITY STRUCTURES. WHILE ALL OBSTACLES TO FUTURE INVESTIGATIONS WOULD BE REMOVED, CONTAMINATED SOIL UNDERLYING THE CONCRETE WOULD BE EXPOSED WITH A RESULTANT POTENTIAL INCREASE IN RISK.

ALTERNATIVE D4 WOULD SIGNIFICANTLY REDUCE RISKS DUE TO DIRECT CONTACT, ASBESTOS MIGRATION, AND STRUCTURAL COLLAPSE BY REMOVING ALL ABOVE-GROUND STRUCTURES OF CONCERN. CONCRETE PADS AND FOUNDATIONS WOULD REMAIN IN PLACE TO BE ADDRESSED BY A FUTURE REMEDY. THE MAJORITY OF OBSTACLES TO FUTURE INVESTIGATION WOULD BE ELIMINATED.

ALTERNATIVE D3 WOULD SIGNIFICANTLY REDUCE RISKS DUE TO DIRECT CONTACT AND ASBESTOS MIGRATION BY REMOVING TANKS AND ASSOCIATED RESIDUALS AND ASBESTOS ASSOCIATED WITH TANKS AND PROCESS LINES. RISKS DUE TO STRUCTURAL COLLAPSE WOULD BE REDUCED BY FENCING BUT WOULD NOT BE ELIMINATED FOR ONSITE WORKERS. MANY OBSTACLES TO FUTURE INVESTIGATION WOULD REMAIN.

ALTERNATIVE D2 WOULD ONLY REDUCE RISKS FROM DIRECT CONTACT AND INJURY TO TRESPASSERS. ALTERNATIVE D1 WOULD NOT REDUCE RISKS DUE TO DIRECT CONTACT WITH TANK RESIDUALS, MIGRATION OF ASBESTOS, OR SAFETY HAZARDS FROM

STRUCTURAL COLLAPSE. IN BOTH CASES, ALL OBSTACLES TO FUTURE INVESTIGATION WOULD REMAIN.

#### 2) COMPLIANCE WITH ARARS

ALTERNATIVE D5 WOULD MEET RCRA CLOSURE ARARS UNDER 40 CFR PART 265.

ALTERNATIVE D4 WOULD MEET RCRA CLOSURE ARARS UNDER 40 CFR PART 265 FOR ALL PORTIONS OF THE FACILITY, WITH THE EXCEPTION OF CONCRETE PADS AND FOUNDATIONS, WHICH WOULD BE ADDRESSED IN A SUBSEQUENT REMEDIAL ACTION.

ALTERNATIVE D3 WOULD MEET ALL RCRA ARARS FOR TANK CLOSURE (40 CFR PART 265, SUBPART J). HOWEVER, RCRA CLOSURE ARARS FOR THE BALANCE OF THE FACILITY WOULD BE ADDRESSED IN A SUBSEQUENT ACTION.

ALTERNATIVES D2 AND D1 WOULD NOT BE IN COMPLIANCE WITH RCRA CLOSURE ARARS.

## 3) LONG-TERM EFFECTIVENESS AND PERMANENCE

ASBESTOS WOULD BE REMOVED LEAVING

ALTERNATIVE D5 AFFORDS A HIGH DEGREE OF LONG-TERM EFFECTIVENESS AND PERMANENCE BECAUSE ALL FACILITY STRUCTURES WOULD BE REMOVED FROM THE SITE. HOWEVER, SOILS UNDERLYING EXCAVATED CONCRETE WILL BE SUSCEPTIBLE TO OFFSITE MIGRATION AND MAY POSE A DIRECT CONTACT RISK UNTIL ADDRESSED BY A SUBSEQUENT REMEDY. FOR ALTERNATIVE D4, THE MAJORITY OF ABOVE-GROUND STRUCTURES AND ASSOCIATED FRIABLE AND NON-FRIABLE ASBESTOS WOULD BE REMOVED, BUT CONCRETE SLABS AND FOUNDATIONS WOULD REMAIN UNTIL

ADDRESSED BY A SUBSEQUENT REMEDY. FOR ALTERNATIVE D3, ONLY THE TANKS AND ASSOCIATED RESIDUALS AND FRIABLE

SAFETY HAZARDS ASSOCIATED WITH BUILDINGS AND SIGNIFICANT OBSTACLES TO FUTURE INVESTIGATION. OF THE ACTION ALTERNATIVES, ALTERNATIVE D2 AFFORDS THE LOWEST DEGREE OF LONG-TERM EFFECTIVENESS AND PERMANENCE BECAUSE ALL OF THE FACILITY COMPONENTS WOULD REMAIN IN PLACE.

# 4) REDUCTION OF TOXICITY, MOBILITY, OR VOLUME THROUGH TREATMENT

ALTERNATIVES D5, D4, AND D3 USE SURFACE CLEANING TO REDUCE THE TOXICITY OF ALL NONPOROUS MATERIALS, EXCEPT FOR PIPING, TO BE DISMANTLED UNDER THE RESPECTIVE ALTERNATIVES. DECONTAMINATION FLUIDS GENERATED DURING THE SURFACE CLEANING OPERATIONS WOULD BE TREATED AT THE CST PLANT.

ALTERNATIVES D1 AND D2 DO NOT REDUCE THE TOXICITY, MOBILITY, OR VOLUME OF CONTAMINANTS.

# 5) SHORT-TERM EFFECTIVENESS

DURING THE IMPLEMENTATION OF ALTERNATIVE D2 THERE WOULD NOT BE INCREASED RISKS TO THE COMMUNITY OR THE ENVIRONMENT. HOWEVER, EXISTING RISKS TO WORKERS DUE TO STRUCTURAL COLLAPSE WOULD REMAIN.

ALTERNATIVES D5, D4, AND D3 ARE SIMILAR WITH RESPECT TO SHORT-TERM EFFECTIVENESS. MEASURES WOULD BE REQUIRED TO PROTECT THE PUBLIC FROM POTENTIAL AIR EMISSIONS DURING DISMANTLING AND SURFACE CLEANING ACTIVITIES.

PROPER ADHERENCE TO SAFETY PRACTICES WOULD BE REQUIRED TO PROTECT ONSITE WORKERS. MEASURES WOULD ALSO BE REQUIRED TO PROTECT THE ENVIRONMENT FROM SPILLS DURING SURFACE CLEANING.

## 6) IMPLEMENTABILITY

NO REMEDIAL ACTIONS WOULD BE IMPLEMENTED UNDER ALTERNATIVE D1.

ALTERNATIVES D2 THROUGH D5 REQUIRE FENCE REPAIR AND RECONSTRUCTION. THE FENCING WOULD BE RELIABLE IN CONTROLLING UNAUTHORIZED ACCESS, IF IT IS PROPERLY MAINTAINED.

IMPLEMENTABILITY CONSIDERATIONS ARE SIMILAR FOR ALTERNATIVES D3, D4, AND D5, WHICH INVOLVE REMOVAL OF PART OR ALL OF THE FORMER PROCESSING FACILITY. CONSTRUCTION OF THE DECONTAMINATION AREA AND STRUCTURAL DISMANTLING ARE RELATIVELY STRAIGHTFORWARD. DECONTAMINATED MATERIALS MUST BE TESTED TO VERIFY THAT THEY ARE CLEAN. RCRA SUBTITLE C AND SUBTITLE D LANDFILLS ARE AVAILABLE.

## 7) COST

THE FOLLOWING ARE THE ESTIMATED 30-YEAR PRESENT-WORTH, CAPITAL, AND ANNUAL OPERATION AND MAINTENANCE COSTS OF THE ALTERNATIVES FOR THE TANKS, EQUIPMENT, AND STRUCTURES:

| ALTERNATIVE<br>IDENTIFICATION | PRESENT<br>WORTH COST | CAPITAL COST | ANNUAL OPERATION & MAINTENANCE COST |
|-------------------------------|-----------------------|--------------|-------------------------------------|
| D1                            | \$16,000              | \$0          | \$1,040                             |
| D2                            | \$141,000             | \$61,500     | \$5,200                             |
| D3                            | \$1,130,000           | \$1,050,000  | \$5,200                             |
| D4                            | \$2,830,000           | \$2,750,000  | \$5,200                             |
| D5                            | \$6,465,000           | \$6,390,000  | \$5,200                             |

#### 8) STATE ACCEPTANCE

THE STATE OF WEST VIRGINIA CONCURS WITH THE SELECTION OF ALTERNATIVE D4.

#### 9) COMMUNITY ACCEPTANCE

BASED ON COMMENTS RECEIVED DURING THE PUBLIC COMMENT PERIOD AND AT THE PUBLIC MEETING, THERE IS COMMUNITY SUPPORT FOR THE SELECTION OF ALTERNATIVE D4. SEE RESPONSIVENESS SUMMARY FOR A SUMMARY OF PUBLIC COMMENTS AND THE RESPONSE OF EPA TO THESE COMMENTS.

#SR

SELECTED REMEDY

SECTION 121 OF CERCLA, 42 USC SECTION 9621, AS AMENDED BY SARA, AND THE NATIONAL CONTINGENCY PLAN (NCP) ESTABLISH A VARIETY OF REQUIREMENTS RELATING TO THE SELECTION OF REMEDIAL ACTIONS. THE SELECTED REMEDY FOR REMEDIATING THE TANKS, EQUIPMENT, AND BUILDINGS AT THE FIKE/ARTEL SITE IS ALTERNATIVE D4 - PARTIAL FACILITY REMOVAL. THE ESTIMATED PRESENT WORTH OF THIS REMEDY IS \$2,830,000. BASED ON CURRENT INFORMATION, THIS ALTERNATIVE WOULD APPEAR TO PROVIDE THE BEST BALANCE OF TRADE-OFFS AMONG THE ALTERNATIVES WITH RESPECT TO THE NINE CRITERIA THAT EPA USES TO EVALUATE EACH ALTERNATIVE.

ALTERNATIVE D4 INVOLVES DISMANTLING AND DECONTAMINATION OF ALL TANKS, EQUIPMENT, AND THE MAJORITY (OR ALL) OF THE ONSITE BUILDINGS. CONCRETE SLABS AND FOUNDATIONS WOULD NOT BE REMOVED. ASBESTOS-CONTAINING MATERIALS COULD BE DISPOSED IN AN OFFSITE LANDFILL FOR NONHAZARDOUS WASTE. DECONTAMINATED TANKS AND OTHER DECONTAMINATED FACILITY COMPONENTS WOULD BE SOLD AS SCRAP, RECYCLED, OR DISPOSED IN AN OFFSITE RCRA SUBTITLE C OR SUBTITLE D LANDFILL. THE SUBTITLE D LANDFILL OF CONCERN SHOULD MEET MINIMUM TECHNOLOGY REQUIREMENTS UNDER SUBTITLE D CRITERIA PROPOSED IN 40 CFR 258.40 AND 40 CFR 258.50. ANY FACILITY COMPONENTS THAT CONTAIN A RCRA HAZARDOUS WASTE (OR A SUBSTANCE SIMILAR TO SUCH WASTE) AND THAT COULD NOT BE DECONTAMINATED WOULD BE DISPOSED AT A RCRA SUBTITLE C LANDFILL. THE EXISTING PERIMETER FENCE WOULD BE MAINTAINED. FLUIDS RESULTING FROM DECONTAMINATION WOULD BE TREATED AT THE CST PLANT. THESE FLUIDS WOULD BE STORED IN A TANK PRIOR TO TREATMENT. TABLE 6 PROVIDES A LIST OF ARARS FOR THE SELECTED REMEDY.

## #SD

STATUTORY DETERMINATIONS

ALTERNATIVE D4 WOULD ACHIEVE SUBSTANTIAL REDUCTION IN RISKS AND SAFETY HAZARDS THROUGH REMOVAL OF THE MAJORITY OF FACILITY COMPONENTS. RISKS ASSOCIATED WITH MIGRATION OF ASBESTOS, DIRECT CONTACT WITH TANK AND EQUIPMENT CONTAMINANT RESIDUALS, AND STRUCTURAL COLLAPSE WOULD BE ELIMINATED. CONCRETE PADS AND FOUNDATIONS WOULD REMAIN AND THUS PRESENT SOME OBSTRUCTIONS TO FUTURE SITE INVESTIGATIONS. HOWEVER, REMOVAL OF THESE MATERIALS WOULD EXPOSE UNDERLYING CONTAMINATED SOIL RESULTING IN POTENTIAL UNACCEPTABLE INCREASES IN RISK.

THIS ACTION IS NOT THE FINAL ACTION FOR THE SITE AND DOES NOT ATTEMPT TO ENSURE COMPLIANCE WITH ARARS FOR THE ENTIRE SITE. IT WILL BE CONSISTENT, HOWEVER, WITH THOSE ACTION-SPECIFIC ARARS ADDRESSING CLOSURE OF TANK SYSTEMS CONTAINING RCRA HAZARDOUS WASTES (OR SIMILAR MATERIALS) AND EQUIPMENT/STRUCTURES CONTAINING RCRA HAZARDOUS WASTES (OR SIMILAR MATERIALS).

THIS ALTERNATIVE IS IN FULL COMPLIANCE WITH RCRA TANK CLOSURE STANDARDS. THE RCRA CLOSURE STANDARDS FOR TANKS (40 CFR PART 265, SUBPART J) ARE APPLICABLE FOR ANY TANKS AND VESSELS THAT CONTAIN OR ARE CONTAMINATED WITH RCRA HAZARDOUS WASTES. TANK CLOSURE STANDARDS ARE RELEVANT AND APPROPRIATE FOR TANKS AND VESSELS CONTAINING

MATERIALS SUFFICIENTLY SIMILAR TO RCRA HAZARDOUS WASTES. RCRA TANK CLOSURE STANDARDS REQUIRE DECONTAMINATION AND/OR PROPER DISPOSAL OF TANKS. RCRA CLOSURE STANDARDS (40 CFR PART 265, SUBPART G) ARE APPLICABLE FOR EQUIPMENT AND/OR STRUCTURES CONTAINING A RCRA HAZARDOUS WASTE AND RELEVANT AND APPROPRIATE WHERE EQUIPMENT AND/OR STRUCTURES CONTAIN A MATERIAL SUFFICIENTLY SIMILAR TO A RCRA HAZARDOUS WASTE. ANY TANK, COMPONENT, OR RESIDUAL THAT COULD NOT BE TREATED BY THE CST WILL BE TRANSPORTED TO OFFSITE FACILITIES IN COMPLIANCE WITH STANDARDS FOR HAZARDOUS WASTE GENERATORS AND TRANSPORTERS (40 CFR PARTS 262 AND 263) AND DOT REGULATIONS PERTAINING TO TRANSPORTATION OF HAZARDOUS MATERIALS (49 CFR PARTS 107 AND 171 THROUGH 179).

THE SELECTED REMEDY IS PROTECTIVE OF HUMAN HEALTH AND THE ENVIRONMENT. THE OVERALL EFFECTIVENESS OF THIS REMEDY IS PROPORTIONAL TO THE PROJECTED COSTS AND PROVIDES THE BEST BALANCE OF TRADE-OFFS AMONG THE ALTERNATIVES WITH RESPECT TO THE EVALUATION CRITERIA. THE LOCAL COMMUNITY AND THE STATE OF WEST VIRGINIA ARE IN SUPPORT OF THE SELECTED REMEDY.

#RS

# II. RESPONSIVENESS SUMMARY

THE PUBLIC COMMENT PERIOD FOR THIS PROPOSED PLAN EXTENDED FROM JULY 25, 1990 TO SEPTEMBER 22, 1990. BELOW IS A SUMMARY OF COMMENTS ON THE PROPOSED PLAN SUBMITTED TO EPA DURING THE PUBLIC COMMENT PERIOD AND PROVIDED VERBALLY TO EPA DURING A PUBLIC MEETING HELD ON AUGUST 6, 1990. ORIGINAL WRITTEN COMMENTS AND A TRANSCRIPT OF THE PUBLIC MEETING ARE INCLUDED IN THE ADMINISTRATIVE RECORD. ALSO INCLUDED BELOW ARE EPA RESPONSES TO THE COMMENTS OF CONCERN.

IN MANY CASES, COMMENTS SUBMITTED DURING THE PUBLIC COMMENT PERIOD OF CONCERN WERE REGARDING THE FIKE/ARTEL SITE, BUT NOT ON THE PROPOSED PLAN ISSUED ON JULY 25, 1990. THESE COMMENTS ARE INCLUDED IN THE ADMINISTRATIVE RECORD BUT ARE NOT INCLUDED IN THIS RESPONSIVENESS SUMMARY FOR THE SUBJECT PROPOSED PLAN.

COMMENT (C): IT IS UNCLEAR HOW MUCH ASBESTOS IS ONSITE.

RESPONSE (R): AS NOTED IN THE PROPOSED PLAN AND THE FFS, THE SITE CONTAINS THE FOLLOWING ASBESTOS-CONTAINING MATERIAL AT THIS TIME: PIPE INSULATION (OVER 600 LINEAR FEET), TANK INSULATION (300 SQUARE FEET), COOLING TOWER WALLS (800 SQUARE FEET), ROOFING (3,900 SQUARE FEET) AND BULK MATERIAL (50 CUBIC FEET). PIPE AND TANK INSULATION IS CONSIDERED TO BE FRIABLE, AS WELL AS THE BULK MATERIAL. ALL OF THE ABOVE FIGURES ARE ESTIMATES BASED ON OBSERVATIONS.

- C: MANY OF THE MATERIALS BEING REMOVED FROM THE SITE BY EPA UNDER OU-1 ARE RAW MATERIALS, FINISHED PRODUCTS, IN-PROCESS CHEMICALS AND BY-PRODUCTS.
- R: THE EPA AGREES THIS MAY BE THE CASE. MANY OF THE MATERIALS BEING REMOVED, WHILE NOT HAZARDOUS WASTES UNDER RCRA, PRESENT A SIMILAR THREAT TO PUBLIC HEALTH AND THE ENVIRONMENT GIVEN CURRENT CONDITIONS AT THE ABANDONED FACILITY.
- C: THE EPA SHOULD ABANDON THE SITE. USED EQUIPMENT SHOULD THEN BE SOLD AND THE PROCEEDS USED TO SATISFY LIENS FOR TAXES, EMPLOYEE WAGES AND BENEFITS, AND OTHER LEGITIMATE CLAIMS. THE PROCEDURES UTILIZED FOR DECONTAMINATING SHOULD BE CONSISTENT WITH THOSE BEING USED IN OTHER PLANTS IN THE KANAWHA VALLEY. FURTHERMORE, THIS PARTY HAS OFFERED HIS SERVICES AT NO COST TO ASSIST IN THE PROCESS OF EQUIPMENT DECONTAMINATION.
- R: THE EPA HAS EVALUATED THE NO ACTION (OR ABANDONMENT) ALTERNATIVE FOR TANKS, EQUIPMENT AND STRUCTURES AT THE SITE. THIS EVALUATION HAS CONCLUDED THAT THIS ALTERNATIVE DOES NOT ADDRESS UNACCEPTABLE RISKS IDENTIFIED ON PAGES 23 AND 26, AND IS NOT PROTECTIVE OF PUBLIC HEALTH AND THE ENVIRONMENT. THEREFORE, THIS ALTERNATIVE HAS BEEN REJECTED.

USED EQUIPMENT FROM THE SITE MAY BE SOLD FOR THE PURPOSES NOTED ABOVE. HOWEVER, THE EQUIPMENT OF CONCERN MUST BE DECONTAMINATED PER APPLICABLE OR RELEVANT AND APPROPRIATE REQUIREMENTS UNDER RCRA (40 CFR PART 265, SUBPARTS G AND J) PRIOR TO SALE. DECONTAMINATION REQUIREMENTS FOR

EQUIPMENT IN THIS CASE WILL DIFFER FROM THOSE REQUIREMENTS FOR ACTIVELY OPERATING PLANTS DUE TO FACILITY CLOSURE REQUIREMENTS UNDER RCRA AND REMEDIAL REQUIREMENTS UNDER CERCLA.

EPA WILL COOPERATE WITH RESPONSIBLE PARTIES WITH REGARD TO THE SALE OF EQUIPMENT PROVIDED THAT ASSOCIATED ACTIVITIES DO NOT UNDULY INTERFERE WITH THE REMEDIAL ACTION SELECTED IN THIS ROD. A POTENTIALLY RESPONSIBLE PARTY MAY PARTICIPATE IN THE SITE REMEDIATION. HOWEVER, THE TERMS OF SUCH PARTICIPATION MAY BE SUBJECT TO A CONSENT AGREEMENT BETWEEN THE PARTY OF CONCERN AND EPA.

- C: DOES THE SELECTED ALTERNATIVE INCLUDE DISPOSAL OF ALL ASBESTOS-CONTAINING MATERIALS, AS DEFINED BY THE CLEAN AIR ACT, IN A DISPOSAL SITE OPERATED IN ACCORDANCE WITH 40 CFR SECTION 61.156.
- R: YES. THE REMEDY INCLUDES SUCH A REQUIREMENT.
- C: THE ONLY ACCEPTABLE ALTERNATIVE FOR THE CONTINUATION OF THE CLEANUP PROCESS IS ALTERNATIVE D5 COMPLETE FACILITY REMOVAL.
- R: THE EPA AGREES THAT COMPLETE FACILITY REMOVAL IS NECESSARY IN THIS CASE. HOWEVER, AT THIS TIME, THE EPA AND THE STATE OF WEST VIRGINIA BELIEVE THAT CONCRETE PADS AND BUILDING FOUNDATIONS SHOULD BE LEFT IN PLACE TO BE ADDRESSED BY A SUBSEQUENT REMEDY. THE CONCRETE OF CONCERN IS KNOWN TO COVER HIGHLY CONTAMINATED SOIL IN MANY CASES. SHOULD THE CONCRETE BE REMOVED, THE SOIL OF CONCERN SHALL BE EXPOSED AND RESULTANT HEALTH RISKS TO BOTH ONSITE WORKERS AND LOCAL RESIDENTS MAY REACH UNACCEPTABLE LEVELS. THEREFORE, THE CONCRETE SHOULD BE LEFT IN PLACE UNTIL A REMEDY FOR UNDERLYING SOIL IS IMPLEMENTED.
- C: ALTERNATIVE D1 NO ACTION, OR ALTERNATIVE D2 FENCING, SHOULD BE SELECTED AT THIS TIME. EPA AND THE STATE OF WEST VIRGINIA SHOULD DEFER CONSIDERATION OF THE PROPOSED PLAN UNTIL A FULL REMEDIAL INVESTIGATION/FEASIBILITY STUDY FOR THE SITE IS COMPLETE.
- R: THE NATIONAL CONTINGENCY PLAN, SECTION 300.430 (A)(1)(II)(A), PROVIDES THAT "SITES SHOULD GENERALLY BE REMEDIATED IN OPERABLE UNITS WHEN EARLY ACTIONS ARE NECESSARY OR APPROPRIATE TO ACHIEVE SIGNIFICANT RISK REDUCTION QUICKLY, WHEN PHASED ANALYSIS OR RESPONSE IS NECESSARY OR APPROPRIATE GIVEN THE SIZE OR COMPLEXITY OF THE SITE, OR TO EXPEDITE THE COMPLETION OF A TOTAL CLEANUP".

IN THIS CASE, IMPLEMENTATION OF THE SELECTED ALTERNATIVE IS PART OF A PHASED REMEDIAL RESPONSE WHICH IS APPROPRIATE FOR THE SPECIFIC CONDITIONS OF THE SITE. IN PARTICULAR, REMOVAL OF FACILITY COMPONENTS IS NECESSARY TO PROVIDE ACCESS FOR THE REMEDIAL INVESTIGATION OF SOILS AND BURIED MATERIALS. FURTHERMORE, REMOVAL OF OBSTACLES TO FUTURE INVESTIGATION WILL EXPEDITE THE COMPLETION OF FULL SITE CLEANUP.

IN ADDITION, UNSTABLE TANKS, EQUIPMENT AND/OR STRUCTURES CONSTITUTE A SAFETY HAZARD TO PERSONNEL CONDUCTING ON-SITE INVESTIGATION ACTIVITIES AND CHEMICAL RESIDUALS WITHIN THESE COMPONENTS PRESENT A POTENTIAL, UNACCEPTABLE RISK TO HUMAN HEALTH IN THE EVENT OF A FIRE OR RELEASE DUE TO STRUCTURAL COLLAPSE. DUE TO THESE CONDITIONS, IT IS NECESSARY TO IMPLEMENT THE SELECTED REMEDY QUICKLY.

# TABLE 3

# OVERHEAD PIPING SUMMARY FIKE/ARTEL SITE NITRO, WEST VIRGINIA

# LENGTH OF OVERHEAD PIPE (FEET)

|               |                    | (/               |
|---------------|--------------------|------------------|
| PIPE DIAMETER |                    |                  |
| (INCHES)      | UTILITY SERVICE(1) | PRODUCT/MATERIAL |
|               |                    | CONVEYANCE       |
|               |                    |                  |
| 6             | 410                |                  |
| 4             | 1,095              |                  |
| 3             | 370                |                  |
| 2             | 425                |                  |
| 1-1/2         | 4,425              | 1,200(3)         |
| 1             | 505                | 280(2)           |
| 3/4           | 905                |                  |
| 1/2           | 330                |                  |
|               |                    |                  |
| TOTAL         | 8,465              | 1,480            |
| -             | -,                 | _,,              |

- (1) UTILITY SERVICE INCLUDES STEAM, CONDENSATE, BRINE (REFRIGERANT), AIR, AND INERT GAS TRANSFER PIPELINES.
- (2) METHYL MERCAPTAN TRANSFER LINE BETWEEN AREAS III AND VI.
- (3) CARBON DISULFIDE, AMMONIA, MERCAPTAN, AND XYLENE TRANSFER LINES BETWEEN RAILROAD LINE AND TANK FARM ADJACENT TO BUILDING W.

# TABLE 4 TANK WASTE VOLUMES FIKE/ARTEL SITE NITRO, WEST VIRGINIA

| WASTE TYPE(1)              |        | COMPATIBILITY GROUPS INCLUDED(3)                             |
|----------------------------|--------|--|
| INORGANIC ACIDS            | 30     | AL   |
| INORGANIC<br>BASE/NEUTRALS | 12,836 | BNL, BNSOL   |
| CYANIDE                    | 14,004 | CNL, COCNL, ACNL,<br>OCNL, FCOCNL, CNSOL,<br>FOCNSOL, OCNSOL |
| FLAMMABLE                  | 94     | FSOL, FAOL   |
| ORGANICS                   | 16,627 | OL, FCOL, COL, OSOL, COSOL, FCOSOL                           |
| OXIDIZERS                  | 60     | AOXSOL   |
| REACTIVE                   | 5,042  | R (SOL)  |
| SULFIDE                    | 32,464 | SL, FOSL, OSL, FSL, FSSOL,                                   |
| UNKNOWN                    | 1,691  | OSSOL, SSOL  |
| TOTAL                      | 82,848 |  |

- (1) WASTE TYPES CATEGORIZED USING COMPATIBILITY GROUPS SHOWN FOR TREATMENT TECHNOLOGY SCREENING. DOES NOT INCLUDE DIOXIN-CONTAMINATED SLUDGES IN TANKS 10307 AND 10342-351 (66,693 GALLONS).
- (2) VOLUME CALCULATIONS BASED ON DATA COLLECTED DURING REM III REMEDIAL INVESTIGATION, OCTOBER-NOVEMBER 1989 (TANK DIMENSIONS AND DEPTH OF WASTE). CONFIRMED BY REM III INSPECTION, MAY 1990 AND ERT INSPECTION, JUNE 1990.
- (3) COMPATIBILITY GROUPS DETERMINED BY EPA EMERGENCY RESPONSE TEAM BASED ON SAMPLES OF TANK WASTE. REM III TANK SURVEY DATA USED TO DETERMINE PHASE OF MATERIAL (LIQUID OR SOLID/SLUDGE).

# GLOSSARY OF COMPATIBILITY GROUPS:

| A  | ACIDIC              | 0   | ORGANIC  |
|----|---------------------|-----|----------|
| BN | BASE NEUTRAL        | OX  | OXIDIZER |
| CN | CYANIDE             | R   | REACTIVE |
| CO | CHLORINATED ORGANIC | S   | SULFIDE  |
| F  | FLAMMABLE           | SOL | SOLID    |
| L  | LIQUID              |     |          |

# TABLE 5

# 

| MATERIAL   | AMOUNT OF ACM(2)   |
|--|--|
| PIPE INSULATION(1) TANK INSULATION ROOFING COOLING TOWER WALLS FURNACE GASKET BULK | 623 LF<br>302 SF<br>3,900 SF(3)<br>800 SF(3)<br>10 SF<br>54 CF |
| TOTALS   | 623 LF;<br>5,012 SF;<br>54 CF                                  |
| TOTAL FRIABLE ACM  | 623 LF;<br>312 SF;<br>54 CF                                    |

- (1) PIPES UNDER 6-INCH DIAMETER.
- (2) UNITS:
  - LF = LINEAR FEET (SMALL-DIAMETER PIPING);
  - SF = SQUARE FEET;
  - CF = CUBIC FEET, INSULATION IN PILES AROUND SITE.
- (3) THIS MATERIAL IS CONSIDERED AS ACM BUT IS NOT FRIABLE.

# TABLE 6

# APPLICABLE OR RELEVANT AND APPROPRIATE REQUIREMENTS $(ARARS) \ FOR \ SELECTED \ REMEDY \\ FIKE/ARTEL \ SITE \\ NITRO, \ WEST \ VIRGINIA$

# ACTION-SPECIFIC ARARS

| CITATION                                       | DESCRIPTION  |
|--|--|
| 29 CFR 1904(*)                                 | OSHA - RECORDKEEPING AND REPORTING OF OCCUPATIONAL INJURIES AND ILLNESS.   |
| 29 CFR 1910(*)                                 | OSHA - OCCUPATIONAL, SAFETY AND HEALTH<br>STANDARDS FOR EMPLOYEES ENGAGED IN HANDLING<br>HAZARDOUS MATERIALS.      |
| 20 CFR 1926(*)                                 | OSHA - SAFETY AND HEALTH REGULATIONS FOR CONSTRUCTION.   |
| 40 CFR 258                                     | PROPOSED MINIMUM DESIGN STANDARDS FOR LOCATION, DESIGN, OPERATION, AND CLOSURE OF MUNICIPAL SOLID WASTE LANDFILLS. |
| 40 CFR 262<br>WVCSR 45-45-8.6                  | FEDERAL AND STATE STANDARDS APPLICABLE TO GENERATORS OF HAZARDOUS WASTE.   |
| 40 CFR 263                                     | FEDERAL STANDARDS APPLICABLE TO TRANSPORTERS OF HAZARDOUS WASTE.   |
| 49 CFR 107 AND<br>171-179(*)                   | DOT REQUIREMENTS FOR TRANSPORT OF HAZARDOUS MATERIALS.   |
| 40 CFR 265<br>SUBPART G AND<br>WVCSR 47-35-8.6 | FEDERAL AND STATE STANDARDS FOR CLOSURE AND POST-CLOSURE OF HAZARDOUS WASTE FACILITIES.                            |
| 40 CFR 265<br>SUBPART J AND<br>WVCSR 47-35-9.8 | FEDERAL AND STATE STANDARDS FOR HAZARDOUS WASTE TANKS INCLUDING CLOSURE AND POST CLOSURE REQUIREMENTS.             |

# CHEMICAL-SPECIFIC ARARS

| CITATION                          | DESCRIPTION  |
|-----------------------------------|--|
| 40 CFR 50(*)                      | NATIONAL AMBIENT AIR QUALITY STANDARDS FOR CARBON MONOXIDE, LEAD, NITROGEN OXIDES, OZONE, PARTICULAR MATTER, AND SULFUR DIOXIDE.   |
| WVCSR 45-8, 9,<br>AND 12(*)       | STATE AMBIENT AIR QUALITY STANDARDS FOR SULFUR DIOXIDE, PARTICULATE MATTER, CARBON MONOXIDE, OZONE, NONMETHANE HYDROCARBONS, AND NITROGEN DIOXIDE.   |
| WVCSR 45-17(*)                    | STATE REGULATIONS TO PREVENT AND CONTROL PARTICULATE AIR POLLUTION FROM MATERIALS HANDLING, PREPARATION, STORAGE, AND SOURCES OF FUGITIVE PARTICULATE MATTER (MATERIAL HANDLING), PREPARATION AND STORAGE, DISPOSAL AREAS, ROADS, HALLWAYS AND PARKING LOTS, VEHICLES, AND CONSTRUCTION AND, DEMOLITION ACTIVITIES). |
| 40 CFR 61(*)                      | NATIONAL EMISSION STANDARD FOR ASBESTOS.   |
| WVCSR 46-2(*)                     | POLLUTANT DISCHARGE ELIMINATES SYSTEM REGULATIONS FOR POINT SOURCE DISCHARGES OF WASTEWATER.   |
| (*) TAID TO MEET ADAD TO MATORIAL | TO DE AN ADDITIONE DEGLIDEMENT TO THE  |

(\*) INDICATES ARAR IS KNOWN TO BE AN APPLICABLE REQUIREMENT TO THE SELECTED REMEDY AT THIS TIME; OTHER ARARS LISTED MAY BE APPLICABLE OR RELEVANT AND APPROPRIATE REQUIREMENTS.